## THURSDAY, DECEMBER 29, 1904.

THE FUTURE OF THE HUMAN RACE.

(1) Mankind in the Making. Pp. viii+429. Price 7s. 6d. (2) Anticipations. Pp. 122. Price 6d. (London: Chapman and Hall, Ltd., 1903.) (3) The Food of the Gods. Pp. 317. (London: Macmillan and Co., Ltd., 1904.) Price 6s. By H. G. Wells.

R. WELLS is a man of imagination, and he has let his imaginative faculty play about the great problems that obtrude themselves when we contemplate the new conditions under which civilised man is now living, conditions which must inevitably undergo further change as science advances. Three books of his more especially claim to forecast the future of our race, and to lay down the lines on which education should proceed. These three are "Anticipations," a very bold attempt to peer into the future; "The Food of the Gods," a lively romance full of humour that does not pall from beginning to end of the book; and "Mankind in the Making," a series of essays dealing mainly with education, and advocating radical changes in our methods.

As to style, Mr. Wells is a hard hitter. He pounds at all classes or professions or trades which fall below his standard of efficiency, or who represent, as he thinks, mouldering ideas and systems. He cannot talk patiently of bishops, schoolmasters, army men or plumbers. His philosophy has had its origin in the theory of evolution. He looks at the race of men in the past, the present, and the future, and he sees a long series of births. The individual is trustee for the race of the principle of life. The idea of this trusteeship is to Mr. Wells a great and ennobling one. A man must not look upon his individual life as the all-important thing, but must find his true happiness in the propagation and education of offspring. Nevertheless, we find in "Anticipations" that this ideal will be shared only by a limited number of people. In the world he pictures are many childless ménages, and Mr. Wells himself is prepared to tolerate relaxation of the marriage law and even "sterile gratification." But in this new world there will be also many men of strenuous earnestness and of religious purpose, though not professing a definitely Christian faith, who will be the leading spirits. As a rule they will be fathers of families, for the childless ménages will not fit in with their theory of things.

These men of energy—men of science, engineers, doctors, and so forth—will shape policy and administration. The result will be marvellous efficiency, such as is rarely if ever seen now. There will be no king. Monarchy will have given place to the New Republic. Royalty is connected with all things out of date, with aristocratic privileges, ridiculous costumes and decorations. Therefore it must go. In the New Republic, though so efficiently managed, there will be many idlers. There will be an enormous development of irresponsible wealth, great numbers of people living on invested money, having no cares of management and no duties in connection with their property. It is among this class mainly that will be found the child-

less ménages. The class that supplies unskilled labour, the old servile class, will tend to disappear. The invention of machines capable of performing more cheaply all the work that has hitherto fallen to the unskilled will make such men unnecessary. Peasant proprietors and all small land-holders must pass away. They represent stagnation, and there is room only for go-ahead, adaptable people. Those who fail to adapt themselves will fall into the abyss, the great sink in which wallow all those who are unfitted for the new conditions. The people of the abyss are to be encouraged to extinguish themselves, to practise what would commonly be called vice without offspring resulting.

Mr. Wells is quite alive to the need of an antiseptic in a wealthy society such as he foresees. To keep down excessive accumulations of wealth he proposes heavy death duties, and heavy graduated duties upon irresponsible incomes, "with, perhaps, in addition, a system of terminable liability for borrowers." But besides this there will be at work for many years to come "that most stern and educational of all masters -war." In its methods war will be very unlike anything of which we have as yet had experience. There will be marksmen few in number, but possessed of skill altogether beyond that of the marksmen of today. The army will no longer be officered by men too stupid and indifferent to use properly the inventions of science. No masses of raw, unskilled lads will be driven on to the slaughter.

Some greater synthesis will emerge. Mr. Wells reviews the various large groups of peoples which make up the greater part of the population of the earth. There is the Russian group, the German, Latin, and English groups, and there are the Yellow Races. Mr. Wells does not think the Russian or the German likely to predominate. In the French he has a great belief, though they do not "breed like rabbits." The richness and power of their literature make him think their language will extend itself far. He laments the comparative poverty and meagreness of our literature. Still, he inclines to the belief that a great dominant synthesis of the English-speaking peoples may be formed. Germany will be cowed by the combined English and American Navies, and Anglo-Saxonism will eventually triumph.

There remain the Yellow Races. Their star, too, will pale before that of the Anglo-Saxons. But all syntheses, however great, will eventually fuse into one. There will be a World State, and rival nationalities will be a thing of the past. "Against these old isolations, these obsolescent particularisms, the forces of mechanical and scientific development fight and fight irresistibly."

All these speculations are very interesting reading, but we cannot help regretting that Mr. Wells did not study and reflect a little longer before writing. His imagination, unclogged by knowledge, is apt to run away with him. Though he expresses the greatest reverence for Darwin and his successors, he does not show a very thorough grip of the principles of evolution. To begin with, he seems unaware of the part in the national life that is played by the lower stratum

of society, the "stagnant" masses as he would call them. From this stratum emerge the men of energy so dear to Mr. Wells's heart. Occasionally the son of a poor man, say in Scotland or Yorkshire, rises to eminence. Far more often it takes more than one generation to climb the ladder. But this does not alter the fact that this substratum is an absolute necessity. For the upper strata do not keep up their numbers, and society has been truly described as an organism that is perpetually renewing itself from its base. But Mr. Wells knows only of the abyss into which tumble all the failures of modern life. Such a valuable national asset as peasant land-holders he despises and wishes to abolish. Yet from such "stagnant" classes spring the families that work upward and produce the men of energy that do the highest work of the nation. The downward movement of which Mr. Wells talks so much is comparatively but a puny stream. doubt there is an abyss, no doubt there are in our big towns not a few degraded families which are tending to die out. Yet even the most degraded produce here and there a man of grit, a man, for instance, who enlists and rises to be a non-commissioned officer. The pick of the slum-bred men make fine fighters.

Mr. Wells wishes all citizens to be energetic and up to date. The unadaptable masses must be got rid of. They must be instructed so that the indulgence of their sexual instincts may not lead to their having offspring. Reckless parentage must be in every way And yet Mr. Wells declares that he discouraged. cannot devise any system of selection by which it would be possible to breed good citizens; the qualities demanded are too diverse. So we are to get rid of the reckless classes and depend solely on the careful classes. We are to introduce careful parentage, that is, put a stop to natural selection; but there is to be no scientific selection to take its place. would indeed be disastrous. As it is, our national physique may be poor, but what there is in the nation of physical vigour is due to the great amount of elimination, probably not far short of 50 per cent., that still goes on.

Here is another strange forecast. War is "the most educational of all masters," and yet after many years a great world state will arise and there will be a kind of millennium. If war the great educator, the great antiseptic, is no more, surely the world is likely to be the worse for its absence. What is to make the world better? No doubt Mr. Wells would say, "The advance of science." Science is his sheet anchor. It is to ennoble the national life so that even the idle holders of irresponsible wealth will be powerless to degrade it. But will this be so? No doubt the inventor is ennobled by his brain labour, by his striving to make his dream a reality. And the men of energy who find practical applications of his discoveries are doing work of a kind that often, though not always, elevates the character. But what of the people who merely make use of the discoveries and inventions of others? The man who invents a locomotive engine is likely, at the lowest, to be above the pettiest meannesses. But the mere travelling in railway trains leaves men morally no better and no worse. striving after knowledge is the ennobling thing, and

not the knowledge itself, the making of discoveries. not the enjoyment of them.

This being so, there is a fallacy running all through that very humorous romance "The Food of the Gods"; in the story those who are fed on this food in their infancy and youth grow to a height of some forty feet. The inventors do not add to their inches. In its application this is not true. The mass of mankind remain small in brain and character-they grow, but do not grow much, when their youth is nurtured on the clearest and noblest ideas. The few thinkers discoverers, inventors are the giants. As to education, Mr. Wells has much to say that is worth pondering. He wishes boys to make a real study of the English language and literature. On our success in teaching English and producing good literature depends the answer to the question: Will English retreat before the tongue of some rival synthesis, or will it become the language of the world? For educational purposes, the dead languages, as we might expect, are tried and found wanting. Those who teach them are "fumbling with the keys at the door of a room that was ransacked long ago." F. W. H.

## BRITISH FRESHWATER ALGÆ.

A Treatise on the British Freshwater Algae. By Prof. G. S. West. Pp. xv+372. (Cambridge: At the University Press, 1904.) Price 10s. 6d. net.

A Monograph of the British Desmidiaceae. Vol. i. By W. West and Prof. G. S. West. Pp. xxxvi+224. (London: Printed for the Ray Society, 1904.) Price 25s. net.

HOEVER has sought to gain a practical knowledge of the British freshwater Algæ has in the past been often checked by the impossibility of determining, by the aid of English works, many of the forms met with. During the twenty years that have elapsed since the issue of the latest large English work on the group (Cooke's "British Freshwater Algæ") very great progress has been made in most countries of Europe, in North America, and to some extent in other countries also, in the study of these plants. Very many species previously unknown have been detected, and much light has been thrown on obscure life-histories, on the effects of environment, and on the relationships of the various Algæ to one another, and to other organisms of simple structure. But while so much new knowledge has been gained, it is dispersed in various languages and in numerous volumes; and there has been, in English, no trustworthy guide even to the published results of these years dealing with the British freshwater Algæ. Thus it has become more and more difficult to pursue the study with success, and the need of adequate presentation of the subject has been felt to be very urgent. The works just issued by the Messrs. West are most welcome, and mark a very great advance on earlier books in English dealing with these Algæ. authors possess a unique knowledge of the species and of their distribution in Britain, the result of personal investigations carried on unweariedly in many and varied districts of the British Islands. They have